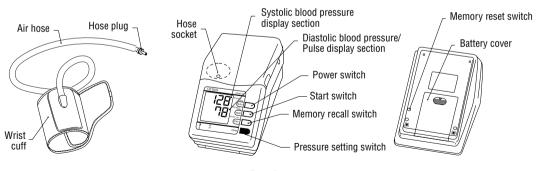
CITIZEN[™]

INSTRUCTION MANUAL FOR DIGITAL BLOOD PRESSURE MONITOR

REF CH-611C

IDENTIFICATION OF PARTS



- Eng 1 -

SPECIFICATIONS

Measuring method: Oscillometric system

Indication: Digital display, Height: 19mm

Measuring range: Pressure; $0 \sim 280$ mmHg, Pulse; $40 \sim 200$ beat/min.

Accuracy: Pressure; ±3mmHg, Pulse; ±5%
Inflation: Automatic inflation by internal pump
Pressurization setting: 4 stage: 160, 200, 240, 280mmHg

Deflation: Automatic constant speed deflation system

Exhaust: Quick exhaust by electromagnetic valve

Memory function: 7 data

Power source: 4 "AA" (R6P, LR6) batteries

Battery life: Approx. 1000 times/LR6 Approx. 350 times/R6P

(once a day, 160mmHg, room temp. 22°C)

Rated voltage: 6V DC

Working temp. & humidity: $+10^{\circ}\text{C} \sim +40^{\circ}\text{C}$, $30\% \sim 85\%\text{RH}$ Storage temp. & humidity: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$, $10\% \sim 95\%\text{RH}$ Outside dimensions: $111\text{mm}(W) \times 178\text{mm}(D) \times 73\text{mm}(H)$ Weight: Approx. 470g (Apparatus batteries and cuff)

Electric shock protection: Type B equipment

Accessories: Cuff, 4 "AA" (R6P) batteries, Instruction manual

^{*}Specifications may be changed without notice in the event of improvements being made.

CLEANING METHOD OF CUFF

After cleaning the cuff with a neutral detergent, lightly rinse it with water and let it dry in the air. Hard rubbing or washing in a washing

machine will cause air leakage. Also, be careful not to get water into the air hose

GENERAL REMARKS

General Remarks on blood pressure measurement

- If the cuff is to be deflated quickly, depress "POWER" switch.
- The attached cuff is suited for a wrist circumstance of 13.5cm to 19.5cm
- When attaching the cuff, rubber cuff hose should be placed on the inside of your wrist.
- Self measurement is no therapy! In no case may you change the dosage of medication prescribed by your physician.
- In operation for blood pressure measurement, you should urinate and should remain relatively still for 10 to 15 minutes prior to measurement
- Exercise, eating and drinking, smoking, etc., prior to measurement may affect the results.
- The blood pressure varies constantly throughout the day. Measurement should be made regularly at the same time each day.
- Do NOT be impressed by the results of one measurement. Keep a record of blood pressure variations. Many readings tell a story.
- Emotional stress may tend to cause pressure to rise.

For proper measurement of blood pressure

- Take a deep breath five or six time and then relax before measuring blood pressure. If you are tense when taking the measurement, you will not get a valid reading.
- Blood pressure will be elevated when you are in a worrisome or irritated state, suffering from lack of sleep or constipation, or after exercise or a meal
- Putting on the cuff is one of the most important tasks for ensuring proper measurement of blood pressure. Wind the cuff around the wrist and tighten it so that one finger may be inserted between the cuff and arm.
- · Do NOT measure blood pressure after bathing or drinking.
- When you feel like relieving yourself, you should do so before measuring blood pressure.
- Measure blood pressure where the room temperature is about 20°C.
 Do NOT measure blood pressure when it is too cold (below 10°C) or too hot (above 40°C) in the room.

- Do NOT measure blood pressure immediately after drinking coffee or tea or smoking.
- Measure blood pressure with a relaxed and quiet posture. Keep the center of the cuff at the level of your heart, and do NOT move your arm or talk during measurement.
- Do NOT keep on measuring so many times, as your arm will have built up congestion of blood, and you will not get a valid reading.

PRECAUTION FOR USE AND MAINTENANCE

Precautions for use

- If you suffer from heart disease, high blood pressure or other circulatory disease, please consult your doctor first.
- If you feel abnormal pressure of the cuff during use or any other irregularity, reduce the pressure by immediately switching off the power or removing the batteries and consult the sales outlet where purchased
- If you think the measured value is abnormal or if measuring makes you feel unwell, discontinue use and consult your doctor.
- Measurement of blood pressure may not be possible for someone with a weak pulse or arrhythmia.
- Congestion, swelling, etc. may occur in some people.
- If blood pressure is measured repeatedly, an accurate result will not be achieved. An interval of about 10 minutes should be allowed.
- The memory is erased if the batteries are removed for replacement, etc. and a record should be kept of any necessary data.

Precautions for maintenance

- Do NOT store the blood pressure monitor where it will be exposed to direct sunlight, high temperature (over 60°C), low temperature (below -20°C), high relative humidity (over 95%) or in a dusty place.
- Do NOT expose the blood pressure monitor to under force or vibration, or drop it.
- · Remove the battery/batteries when not in use for a long period.
- Do NOT disassemble the apparatus.
- Do NOT bend the cuff or air hose unnecessarily.
- NEVER wipe the blood pressure monitor with thinner or benzene, as they may damage it.
- When the monitor is very dirty, wipe it clean with a cloth moistened with Sterilizing alcohol or a neutral detergent, and then wipe it with a dry cloth. Do NOT use thinner or benzene.

Nature and frequency of maintenance:

This products is designed for use over an extended period of time; however, it is generally recommended that it be inspected every two years to ensure proper function and performance.

Protect the nature environment:

Please help protect natural environment by respecting national and/or local recycling regulations when disposing of the batteries and the products at the end of their useful lives

Reference European standard:

This products complies with EC instructions 93/42/EEC (Medical Device Directive) and with the following standards: EN 1060-1: 1995 "Noninvasive Sphygmomanometers, Part 1 General Requirements" and EN 1060-3: 1997 "Noninvasive Sphygmomanometers, Part 3 Supplementary Requirements for Electromechanical Blood-Pressure Measuring Systems".

Manufacturer:

Name: Premier Precision Ltd.
Address: Block E. G-H. 6th floor.

Phase 2. Yip Fat Factory Building.

73-75 Hoi Yuen Road.

Kwun Tong, Kowloon, Hong Kong

European Representative:

Name: WvW elektronische Geräte Vertrieb GmbH.

Address: Robert-Koch-Straße 20,

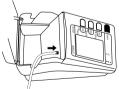
D-80538 München,

GERMANY

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MEASUREMENTS

1. Turn power ON



Insert the Hose plug from the wrist cuff into the hose socket at the mainframe until it is tightly connected.



Press the "Power switch" for power ON.



All display marks appear for approx. 1 second and buzzer beeps.



After all display marks are disappeared, deflation mark "▼" appears for approx. 1 second (three short beeps notify you of ready for measurement) then the last pressure setting value appears for approx. 3 seconds. Then the "0" appears at the display.



Ready for measurement





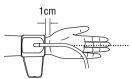
2. Attaching of wrist cuff



· Open the wrist cuff as the figure.



- Turn left hand palm upwards and wrap the cuff around the wrist in the left-figure way that air hose is facing the palm of the hand.
- · Wrap the wrist cuff on bare skin.



 Place the wrist cuff at the 1cm from the wrist edge. At this time, the air hose should be laid across the palm of the hand extending toward the middle finger.



 Wrap the cuff around your wrist securely so that there is no space between the wrist and the cuff.



 Place your elbow on table so that the cuff is at the level as your heart. Relax your entire body, especially from elbow to your finger.

3. Select the value for pressure for measurement



Press the "Pressure Setting Switch" and set the value to a value approximately 40mmHg above your normal systolic blood pressure.

There are 4 settings; 160, 200, 240 and 280mmHg.

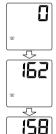
After press on the "Pressure Setting Switch", the set pressure value will be displayed at the lower side of the display.

4. To start the measurement



Press the "Start Switch".

The wrist cuff pressurizes when the "Start Switch" is pressed.



When the pressurization is reached to the set value, air inflation is stopped automatically.

When pressurization is completed, the automatic exhaust mechanism will gradually reduce wrist cuff pressure, and the mark "♥" appears indicating that measurement is in progress.

When a pulse is detected, the pressure value moves to the lower side of the display. At this time the mark "\mathbf{\psi}" flashes and buzzer sounds.



When the diastolic pressure value is detected, the measurement is completed and buzzer sounds.

Systolic pressure is displayed on the upper and diastolic pressure on the lower side of the display.

2 to 3 seconds after completion of measurements, the mark "\nsland" appears and air will deflate immediately.

2 or 3 seconds later, pressure value and pulse appear alternately on the display.

5. Turn power off

Press the "Power Switch" to turn OFF.

6. Subsequent measurements



When a measurement need to be made again, just press the "Start Switch" again.

7. Change of the pressure-setting value



When the pressure setting is needed to be changed, press the "Pressure Setting Switch" and select optimum value.

8. Memory recall

This blood pressure monitor has a function which is able to display last measured value



 Press the "Memory Recall Switch" to recall the last measured blood pressure.
 The last measured systolic and diastolic blood pressure are displayed (Value of the pulse is not memorized nor displayed).



 By a first depressing of "Memory Recall Switch", averaged blood pressure is displayed and " MANN" mark flashes to notify that the displayed value is averaged value.





 By a second depressing of "Memory Recall Switch", the value for latest (last measured value) blood pressure is displayed. "1" mark flushes to notify that the value is the last measured (newest one) value.

 By a third depressing of "Memory Recall Switch", the value for next later blood pressure is displayed. "2" mark flushes to notify that the value is the next later one

As per the same above-mentioned method, you may recall 7 last measured values by depressing of "Memory Recall Switch".

- Memory function works on for approximately 3 seconds or until another switches are pressed. (Even if the last measured value is displayed, you are able to start the measurements by pressing of "Start Switch" or you are able to change the pressure-setting value by pressing of "Pressure Setting Switch" or you are able to turn OFF by depressing of "Power Switch")
- Memory recall function does not work during automatic inflation and blood pressure measurement are being made.

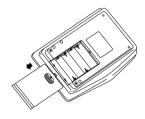
 New blood pressure value is stored in memory at pressing "Power Switch" for turn OFF or at pressing "Start Switch" for new measurement.

9. Automatic power off function

If this unit is left on after measurement, an Automatic Power-OFF Function turns the power OFF after approximately 3 minutes. To continue measurement press the power switch to turn the unit ON.

10. Battery replacement

If the batteries become weak, the "[ET]" mark will appear in the display, indicating that batteries should be replaced with new ones.



Remove the battery cover at mainframe and replace the new four pieces of batteries.

Type "AA" (R6P, LR6) battery or equivalent is suitable for this blood pressure monitor.

DESCRIPTION OF DISPLAY MARKS

DISPLAY MARK	CONDITION/CAUSE	CORRECTIVE ACTION
	Measurement is begun, but the pressure was insufficient.	Change the pressurization setting one level by pressing "Pressure Setting Switch" and measure once again. (Automatic remeasuring will be done only 1 time.)
Err	Appears when the blood pressure could not be measured accurately. (Somenoise was detected or moved arm during measuring.)	Repeat measurement again. First exhaust air from the cuff, reapply the cuff properly and remeasure.
PUL Err	Appears when the pulse could not accurately be measured.	
D	Appears when the batteries become weak.	Replace the batteries.
	Appears when no memory is stored at pressing of "Memory Recall Switch".	Take a measurement.
**		Blood pressure will store automatically.
	Units has a trouble.	Ask purchased shop.

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Consumer Electronics Division

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